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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/824,864 | 04/02/2001 | Kevin J. McGrath | 5500-65900 | 9993 |

7590 09/10/2004
Lawrence J. Merkel
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P.O. Box 398
Austin, TX 78767

EXAMINER

TSAI, HENRY

ART UNIT PAPER NUMBER

2183

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,864

Applicant(s)

MCGRATH, KEVIN J.

Examiner

Henry W.H. Tsai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/14/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 is/are allowed.
- 6) ☒ Claim(s) 19-31 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5/3/04
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5/7/04
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 19-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 19, line 4, it is not clear what is meant by "at least one of the one or more segment descriptors is not used". Which device is to use the at least one of the one or more segment descriptors should be well defined. Similar problems exist in the other claims 24 and 28.

Applicant is required to review the claims and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 19, 21-24, 26-28, 30, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Stallings, "Computer Organization and Architecture", 4th edition, 1996, pages 259-262, and 368-371, herein referred to as Stallings.

Referring to claim 19, Stallings discloses as claimed a method comprising: loading one or more segment descriptors (inside the descriptor registers see Fig. 10.2 on page 369) into segment registers (CS, DS, ES, FS, GS, or SS, see Fig. 10.2 on page 369), the loading performed in a first protected operating mode (such as "displacement" mode wherein one segment register SR, and content of an address field in the instruction A are used, see Table 10.2, on page 370) in which at least one of the one or more segment descriptors is not used even if an instruction specifying the corresponding segment register is

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executed (note in such as immediate mode or register mode, SR is not used even though the segment descriptors are stored in the system); and branching to a code segment (CS see Fig. 10.2 on page 369) which establishes a second protected operating mode (such as "Base with scaled Index and displacement" mode wherein one segment register SR, content of an address field in the instruction A, and other values I, S and B are used, see Table 10.2, on page 370) in which the one or more segment descriptors are used. Note the addressing modes are best reasonably and broadly interpreted as the protected operating mode since the protected operating mode was not well described in the claim. Further note independent claims 24, and 28 each recite the corresponding limitations as set forth in claim 19.

As to claims 21, 26, and 30, Stallings also discloses in the first protected operating mode, a virtual address has greater than 32 bits (see the virtual address comprising 64 bits in Fig. 7.28 on page 260).

As to claims 22, 27, and 31, Stallings also discloses at least another one of the segment descriptors (such as those stored inside the descriptor registers CS and DS, see Fig. 10.2 on page 369) is used if the corresponding segment register is specified by an instruction being executed in the first protected operating mode (such as "displacement" mode wherein one segment

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register SR, and content of an address field in the instruction A are used, see Table 10.2, on page 370).

As to claim 23, Stallings also discloses creating the one or more segment descriptors in one or more segment descriptor tables (note the combination of the descriptor entries in the descriptor registers CS, DS, ES, FS, GS, or SS, see Fig. 10.2 on page 369, are best reasonably and broadly interpreted as the one or more segment descriptor tables, see Fig. 10.2 on page 369).

Allowable Subject Matter

5. Claims 1-18 are allowed.

6. Claims 20, 25, and 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Examiner agrees with Applicants that that Stallings, "Computer Organization and Architecture", 4th edition, 1996, pages 259-262, and 368-371, the closest reference, and the other

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prior art do not teach or fairly suggest: an active protected operating mode of the plurality of protected operating modes is determined, at least in part, responsive to the code segment descriptor (in claim 1; and claims 7, and 13 each recite the corresponding limitations as set forth) in combination with all of the other limitations in the respective independent claims (claims 1, 7, and 13); and the combination is not obvious.

Stallings, "Computer Organization and Architecture", 4th edition, 1996, pages 259-262, and 368-371, the closest reference, and the other prior art do not teach or fairly suggest: the execution core is not responsive to the segment descriptor if the first protected operating mode is active (in claim 3; and claims 9, and 15 each recite the corresponding limitations as set forth) in combination with all of the other limitations in the respective independent claims (claims 3, 9, and 15); and the combination is not obvious.

Response to Amendment

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8. Applicant's arguments filed 7/14/04 have been fully considered but they are not deemed to be persuasive.

Regarding the 35 U.S.C. §112, second paragraph problems, Applicant's response has not completely overcome these objections and rejections.

Applicants argue that the addressing modes are not operating modes (page 12, line 1). Examiner disagrees with Applicants. As set forth in the art rejections above, the addressing modes are best reasonably and broadly interpreted as the protected operating mode since the protected operating mode was not well described in the claim. Stallings anticipates the claimed invention.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Henry Tsai whose telephone number is (703) 308-7600. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Eddie Chan, can be reached on (703) 305-9712. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to

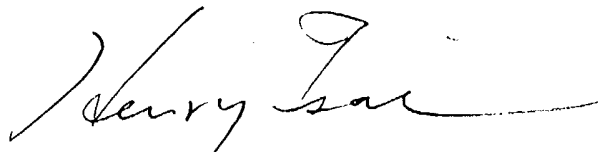
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the TC 2100 receptionist whose telephone number is (703) 305-3900.

10. In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions directly into

the Group at fax number: 703-872-9306.

This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.



HENRY W. H. TSAI
PRIMARY EXAMINEE

September 5, 2004